

ABSTRACT

A reciprocating body 12 is reciprocably housed in a cylinder body 6, and a pressure rod 20 is reciprocably attached to this reciprocating body 12. A pressure end 20a of the pressure rod 20 protrudes from the cylinder body 12 toward the outside. By the reciprocating body 12 and diaphragms 17 to 19, an advance pressure chamber 27 and a weight offset pressure chamber 29 are partitioned and formed in the cylinder body 6. After the pressure end 20a is disposed vertically downwardly, the weight offset pressure chamber 29 is filled with compressed fluid, whereby self weight of the reciprocating body 12 and the pressure rod 20 is offset. Then, the compressed fluid is supplied to the advance pressure chamber 27, and an object to be pressurized W is pressurized through the pressure rod 20.